REMARKS

Receipt of the Office action dated October 4, 2005 is hereby acknowledged. In that action the Examiner: 1) rejected claims 6-9, 11-15, 19-22, 30, 32, 40-42, 47-50 and 54 as allegedly anticipated by McDonald (U.S. Pat. No. 5,069,222); 2) rejected claims 10, 16, 26-29, 46 and 55 as allegedly obvious over McDonald and Derrick (U.S. Pat. No. 5,046,491); 3) rejected claims 23, 24, 33, 43-44, 51 and 53 as allegedly obvious over McDonald; 4) rejected claims 25 and 45 as allegedly obvious over McDonald and Karakasoglu (U.S. Pat. No. 6,213,955); 5) objected to claims 31 and 34 as dependent upon a rejected base claim, but otherwise allowable; and 6) allowed claims 35-39.

With this Response, Applicants amend claims 6-10, 12-13, 15-16, 19-20, 26, 28-31, 34, 40, 46-47 and 49-53, and cancel claim 55. Reconsideration is respectfully requested.

I. ALLOWED AND EFFECTIVELY ALLOWED CLAIMS

Applicants appreciate the allowance of claims 35-39. With this Response, Applicants re-write claim 31 into independent form. It is noted that claim 31 already contained these limitations by virtue of its previous dependency, and thus these amendments are not narrowing amendments. Further, Applicants amend claim 31 to ensure a reading that does not require data from both the inhalation and exhalation. Claim 31 should now be in a condition for allowance.

II. ART-BASED REJECTIONS

A. Claim 6

Claim 6 stands rejected as allegedly anticipated by McDonald. Applicants amend claim 6 to more clearly define over the devices of McDonald which appear to measure temperature associated with airflow, moisture associated with airflow or pressure associated with airflow, but which do not appear to measure actual airflow. Moreover, the amendments are to more clearly define over the devices of McDonald which appear to be placed proximate to the patient's nose and mouth.

McDonald is directed to a respiration sensor set. (McDonald Title). In particular, McDonald discloses a sensor set 10 comprising three sensor elements 16, which could be

"temperature-sensitive, moisture-sensitive, and pressure-sensitive elements." (McDonald Col. 3, lines 49-52; Figure 2). As Applicants read McDonald, regardless of the type of sensors used, those sensors appear to always reside in the support structure 18 proximate to the patient's nose and mouth. (*Id.*; Col. 7, lines 25-35; Figures 2 and 5).

Claim 6, by contrast specifically recites, "measuring at least a portion **of an airflow** of a first naris through a first sensing tube, the measuring creates a first measured airflow ; and measuring at least a portion **of an airflow** of a second naris through a second sensing tube fluidly independent of the first sensing tube, the measuring creates a second measured airflow... ." Applicants respectfully submit that McDonald does not teach or fairly suggest such a system. McDonald teaches measuring temperature associated with airflow, moisture associated with airflow or pressure associated with airflow, but fails to teach or suggest "measuring at least a portion of an airflow." For this reason alone, claim 6 should be allowed.

Moreover, claim 6 further recites, "**measuring** at least a portion of an airflow of a first naris **through a first sensing tube**... the measuring creates a first measured airflow ; and **measuring** at least a portion of an airflow of a second naris **through a second sensing fluidly independent of the first sensing tube**, the measuring creates a second measured airflow... ." Applicants respectfully submit that McDonald does not teach or suggest such a system. In particular, in McDonald the measuring is proximate to the breathing orifices (*see, e.g.*, Figure 2, 3, 5 and 6), and there would be no inherent reason for airflow of the nares to move through the support structure 18.

Based on the foregoing, Applicants respectfully submit that claim 6, and all claims which depend from claim 6 (claims 7-11 and 47-49), should be allowed. Applicants amend claims 9 and 10 to reflect the amendments to claim 6. Applicants amend claims 7 and 8 to remove the "step" terminology to ensure that the claims are not construed under 35 USC §112, paragraph six.

B. Claim 12

Claim 12 stands rejected as allegedly anticipated by McDonald. Applicants amend claim 12 to more clearly define over the support structure 18 holding the sensor elements 16 of McDonald, and to make consistent use of the terms "pressure associated with the airflow."

McDonald is directed to a respiration sensor set. (McDonald Title). In particular, McDonald discloses a sensor set 10 comprising three sensor elements 16, which could be "temperature-sensitive, moisture-sensitive, and pressure-sensitive elements." (McDonald Col. 3, lines 49-52; Figure 2). As Applicants read McDonald, regardless of the type of sensors used, those sensor appear to always reside in the support structure 18. (*Id.*; Col. 7, lines 25-35; Figure 5).

Claim 12, by contrast, specifically recites, "measuring a pressure associated with an airflow by way of a first naris, the measuring through a first sensing tube; and measuring a pressure associated with an airflow by way of a second naris, the measuring the pressure associated with airflow through the second naris through a second sensing tube, the first and second sensing tubes fluidly independen... ." The sensors 16 of McDonald are all within the support structure 18, and thus McDonald fails to expressly or inherently teach "measuring a pressure associated with an airflow by way of a first naris, the measuring through a first sensing tube ...; and measuring a pressure associated with an airflow by way of a second naris, the measuring the pressure associated with airflow through the second naris through a second sensing tube ..., the first and second sensing tubes fluidly independent... ." Even if McDonald is considered with Derrick, McDonald and Derrick still fail to teach the claim limitations as Derrick clearly teaches the sensing tubings fluidly couple at the manifolds 32 and 72. (Derrick Col. 6, line 2; Col. 7, lines 21-22; Figure 3).

Based on the foregoing, Applicants respectfully submit that claim 12, and all claims which depend from claim 12 (claims 13-16), should be allowed. Applicants amend claim 16 to reflect the limitations of claim 12, and to remove wording not needed to define over the cited art. Applicants amend claims 13 and 15 to remove the "step" terminology to ensure that the claims are not construed under 35 USC §112, paragraph six.

C. Claim 19

Claim 19 stands rejected as allegedly anticipated by McDonald. Applicants amend claim 19 to more clearly define over the devices of McDonald which appear to measure temperature associated with airflow, moisture associated with airflow or pressure associated with airflow, but which do not appear to measure actual airflow. Moreover, the amendments are to more clearly define over the devices of McDonald which appear to be placed proximate to the patient's nose and mouth.

McDonald is directed to a respiration sensor set. (McDonald Title). In particular, McDonald discloses a sensor set 10 comprising three sensor elements 16, which could be "temperature-sensitive, moisture-sensitive, and pressure-sensitive elements." (McDonald Col. 3, lines 49-52; Figure 2). As Applicants read McDonald, regardless of the type of sensors used, those sensor appear to always reside in the support structure 18 proximate to the patient's nose and mouth. (*Id.*; Col. 7, lines 25-35; Figures 2 and 5).

Claim 19, by contrast specifically recites, "**the first air mass flow sensor detects airflow** of the first naris... **the second air mass flow sensor detects airflow of the second naris... .**" Applicants respectfully submit that McDonald does not teach or fairly suggest such a system. McDonald teaches measuring temperature associated with airflow, moisture associated with airflow or pressure associated with airflow, but fails to teach or suggest "the first air mass flow sensor detects airflow of the first naris... the second air mass flow sensor detects airflow of the second naris." For this reason alone, claim 19 should be allowed.

Moreover, claim 19 further recites, "a first air mass flow sensor **configured to fluidly couple to a first naris by way of a first sensing tube, the first air mass flow sensor detects airflow of the first naris that flows through the first sensing tube...**; a second air mass flow sensor **configured to fluidly couple to a second naris by way of a second, fluidly indpendent sensing tube, the second air mass flow sensor detects airflow of the second naris that flows through the second sensing tube** ... ." Applicants respectfully submit that McDonald does not teach or suggest such a system. In McDonald the measuring is proximate to the breathing orifices (*see, e.g.*, Figure 2, 3, 5 and 6), and there is no express or inherent

reason for airflow of the nares to move through the support structure 18. Even if McDonald is considered with Derrick, McDonald and Derrick still fail to teach the claim limitations as Derrick clearly teaches the sensing tubings fluidly couple at the manifolds 32 and 72. (Derrick Col. 6, line 2; Col. 7, lines 21-22; Figure 3).

Based on the foregoing, Applicants respectfully submit that claim 19, and all claims which depend from claim 19 (claims 20-30), should be allowed. Applicants amend claims 20, 26 and 28-30 to reflect the amendments to claim 19.

D. Claim 32

Claim 32 stands rejected as allegedly anticipated by McDonald.

McDonald is directed to a respiration sensor set. (McDonald Title). In particular, McDonald discloses a sensor set 10 comprising three sensor elements 16, which could be "temperature-sensitive, moisture-sensitive, and pressure-sensitive elements." (McDonald Col. 3, lines 49-52; Figure 2).

Claim 32, by contrast, specifically recites, "a differential pressure measurement device having first and second ports, wherein the first port is configured to be fluidly coupled to a first nostril of a patient, and wherein the second port is configured to be fluidly coupled to a second nostril of a patient... ." Although McDonald may discuss "pressure-sensitive elements," McDonalds' Figures 2, 3 5 and 6 make clear that these elements are provided one each for each breathing orifice. The McDonald disclosure does not expressly or inherently contain a teaching of "a differential pressure measurement device having first and second ports, wherein the first port is configured to be fluidly coupled to a first nostril of a patient, and wherein the second port is configured to be fluidly coupled to a second nostril of a patient... ."

Based on the foregoing, Applicants respectfully submit that Claim 32, and all claims which depend from claim 32 (claims 33-34), should be allowed. Applicants amend claim 34 to correct a spelling deficiency, and not to define over any cited art.

E. Claim 40

Claim 40 stands rejected as allegedly anticipated by McDonald. Applicants amend claim 40 to more clearly define over the devices of McDonald which appear to be placed proximate to the patient's nose and mouth.

McDonald is directed to a respiration sensor set. (McDonald Title). As Applicants read McDonald, regardless of the type of sensors used, those sensor appear to always reside in the support structure 18 proximate to the patient's nose and mouth. (*Id.*; Col. 7, lines 25-35; Figures 2 and 5).

Claim 40, by contrast specifically recites, "a first pressure sensor **configured to fluidly couple to a first naris by way of a first sensing tube**, the first pressure sensor detects a pressure associated with an airflow through the first naris to create a first measured signal; **a second pressure sensor configured to fluidly couple to a second naris by way of a second sensing tube, the second sensing tube fluidly independent of the first sensing tube**, ..." Applicants respectfully submit that McDonald does not teach or suggest such a system. In McDonald the measuring is proximate to the breathing orifices (*see, e.g.*, Figure 2, 3, 5 and 6), and there is no express or inherent reason to couple the pressure sensors by way of fluidly independent sensing tubes. Even if McDonald is considered with Derrick, McDonald and Derrick still fail to teach the claim limitations as Derrick clearly teaches the sensing tubings fluidly couple at the manifolds 32 and 72. (Derrick Col. 6, line 2; Col. 7, lines 21-22; Figure 3).

Based on the foregoing, Applicants respectfully submit that claim 40, and all claims which depend from claim 40 (claims 41-46), should be allowed. Applicants amend claim 46 to reflect the amendments to claim 40. Applicants amend claims 47 and 49 to remove the "step" terminology to ensure that the claims are not construed under 35 USC §112, paragraph six.

F. Claim 50

Claim 50 stands rejected as allegedly anticipated by McDonald. Applicants amend claim 50 to more clearly define over the devices of McDonald which appear to measure

temperature associated with airflow, moisture associated with airflow or pressure associated with airflow, but which do not appear to measure actual airflow. Moreover, the amendments are to more clearly define over the devices of McDonald which appear to be placed proximate to the patient's nose and mouth.

McDonald is directed to a respiration sensor set. (McDonald Title). In particular, McDonald discloses a sensor set 10 comprising three sensor elements 16, which could be "temperature-sensitive, moisture-sensitive, and pressure-sensitive elements." (McDonald Col. 3, lines 49-52; Figure 2). As Applicants read McDonald, regardless of the type of sensors used, those sensors appear to always reside in the support structure 18 proximate to the patient's nose and mouth. (*Id.*; Col. 7, lines 25-35; Figure 2 and 5).

Claim 50, by contrast specifically recites, "measuring at least a portion **of an airflow** of a first naris through a first sensing tube, ... simultaneously measuring **at least a portion of an airflow** of a second naris through a second, fluidly independent sensing tube ... ." Applicants respectfully submit that McDonald does not teach or fairly suggest such a system. McDonald teaches measuring temperature associated with airflow, moisture associated with airflow or pressure associated with airflow, but fails to teach or suggest "measuring at least a portion **of an airflow**." For this reason alone, claim 50 should be allowed.

Moreover, claim 50 further recites, "**measuring** at least a portion of an airflow of a first naris **through a first sensing tube** ... **measuring** at least a portion of an airflow of a second naris **through a second, fluidly independent sensing tube**... ." Applicants respectfully submit that McDonald does not teach or suggest such a system. In particular, in McDonald the measuring is proximate to the breathing orifices (*see, e.g.*, Figure 2, 3, 5 and 6), and there would be no inherent reason for airflow of the nares to move through the support structure 18.

Based on the foregoing, Applicants respectfully submit that claim 50, and all claims which depend from claim 50 (claims 51-53), should be allowed. Applicants amend claims 51-53 to remove the "step" terminology to ensure that the claims are not construed under 35 USC §112, paragraph six.

G. Claim 55

Claim 55 stands rejected as allegedly obvious over McDonald and Derrick. Applicants amend claim 55 by re-writing the claim into independent form. Claim 55 already contained these limitations by virtue of its previous dependency

McDonald is directed to a respiration sensor set. (McDonald Title). In particular, McDonald discloses a sensor set 10 comprising three sensor elements 16, which could be "temperature-sensitive, moisture-sensitive, and pressure-sensitive elements." (McDonald Col. 3, lines 49-52; Figure 2). As Applicants read McDonald, regardless of the type of sensors used, those sensor appear to always reside in the support structure 18. (*Id.*; Col. 7, lines 25-35; Figure 5). Derrick is directed to an apparatus and method for respired gas collection and analysis. (Derrick Title). Derrick teaches the sensing tubings fluidly couple at the manifolds 32 and 72. (Derrick Col. 6, line 2; Col. 7, lines 21-22; Figure 3).

Claim 55, by contrast, specifically recites, "measuring a pressure associated with an airflow through a first naris by measuring a pressure in a first sensing tube of a bifurcated nasal cannula worn by a patient; and substantially simultaneously measuring a pressure associated with an airflow through a second naris by measuring a pressure in a second sensing tube of the bifurcated nasal cannula worn by the patient." The sensors 16 of McDonald are all within the support structure 18. Derrick teaches the sensing tubings fluidly couple at the manifolds 32 and 72. Thus, McDonald considered with Derrick fails to teach or fairly suggest "measuring a pressure associated with an airflow through a first naris by measuring a pressure in a first sensing tube of a bifurcated nasal cannula ... and ... measuring a pressure associated with an airflow through a second naris by measuring a pressure in a second sensing tube of the bifurcated nasal cannula ...."

Based on the foregoing, Applicants respectfully submit that claim 54 should be allowed.

III. CONCLUSION

In the course of the foregoing discussions, Applicants may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element.

This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the cited art which have yet to be raised, but which may be raised in the future.

Applicants respectfully request reconsideration and that a timely Notice of Allowance be issued in this case. It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to the deposit account of Conley Rose, PC, Deposit Account No. 03-2769.

Respectfully submitted,

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